

PAPERS IN CONNECTION WITH THE BUBONIC PLAGUE.

Notification, dated 2nd March 1899.

It is hereby notified for the information of the public that the Senior Surgeon and Sanitary Commissioner with the Government of Mysore has authorized M. Perumal Naidu, 1st Class Hospital Assistant at Channapatna, to inoculate and grant certificates of inoculation within his jurisdiction.

WEEKLY REPORT OF PLAGUE IN THE MYSORE STATE, EXCLUDING THE CIVIL AND MILITARY STATION, FOR THE WEEK ENDING 10TH MARCH 1899

Bangalore City.

I. The following are the figures in the city up to date:—

	Plague cases.	Plague deaths.	Deaths from all causes.	Normal mortality in the same period.
From 12th August 1898 to 10th February 1899 ..	3,329	2,650	7,018	6.4
Week ending 17th February 1899	1	1	32
Week ending 24th February 1899	31	32
Week ending 3rd March 1899	1	1	31
Week ending 10th March 1899	1	1	32

As in each of the three previous weeks, there was, during the week, in the city, only one case. The arrivals in the city increased from 1,651 in the previous week to 1,803 in the present week, the population in the city being now about 55,132 as against 80,285 before the outbreak of plague according to the Census of 1891.

II. The figures for the Health and Segregation Camps were as follows:—

	Remaining.	Admitted.	Discharged.	Developed plague.	Remaining.
Health Camps ..	274	22	24	..	272
Segregation Camp ..	2	16	2	..	16

III. During the week, there were 449 first and 13 second inoculations, bringing the totals to 32,154 and 1,369, respectively. There were no attacks among inoculated persons during the week.

IV. The Hospital figures were as follows:—

	Remaining.	Admitted.	Discharged.	Died.	Remaining.
For the week ..	1	1	..	1	1
Since commencement ..	..	2,095	741	1,354	..
Inoculates ..	..	105	65	40	..

V. During the week, 339 houses were disinfected as against 263 in the previous week, of which 245 were deserted houses, 52 plague-infected and 42 locked-up ones opened under Government Notification No. 5235—Pg. 21-96.

VI. During the week, permission was given to re-occupy 129 houses; no charge was levied for disinfecting 25 houses; 5 were disinfected by the owners themselves, and the charges collected on the remaining 99 amounted to Rs. 183-4-0.

VII. The cost of road work and pipes laid for water-supply in the Malleswara and Basavangudi Extensions amounted to Rs. 5,559, bringing the total amount spent up to date to Rs. 38,430. During the week 29 infected houses were destroyed, and 26 houses were removed for opening out lanes in the city by the Sanitary Department. Independently of the above, the municipality demolished 3 houses as unfit for human habitation during the week, the total number demolished by the municipality from the commencement being 415.

VIII. During the week under report, 928 persons or a daily average of 132 were disinfected with their effects at the City Railway Station.

Mysore State, outside Bangalore.

IX. The accompanying weekly return shows the state of the epidemic in the Province. Plague is steadily decreasing in the districts of Bangalore, Tumkur and Mysore, but in the district of Kolar, plague cases increased during the week.

In the Bangalore district, excluding Bangalore City, the number of cases during the week was 42 as against 91 in the previous week and 115 in the week ending 24th February 1899. There was a decrease in all the talukas except Nelamangala, in which the number of cases slightly increased from 12 to 14. The taluk of Magadi has now been free for two weeks continuously.

The number of infected villages decreased from 59 to 47, of which only 21 reported cases as against 39 the week previous; only 6 villages were newly infected against 8 in the previous week.

In the Kolar district, excluding the Gold Fields, the number of indigenous cases increased from 18 to 22, while the number of infected villages decreased from 16 to 12. Kolar town was declared infected.

In the Gold Fields the number of indigenous cases and the number of infected villages increased from 33 and 15 to 49 and 17 respectively. The number of villages newly infected in the Gold Fields during the week was 3 as against 4 the week previous. The appended statement shows the incidence of cases among the several Mines for the past 4 weeks.

This week also Tumkur town presented a clean sheet, while in the district the number of cases decreased from 11 to 4, and the number of infected villages decreased by three. The number of newly infected villages was only one, both in the past and the present week.

In the Mysore district, excluding the Mysore City, the number of cases was 27 as against 32 and the number of infected villages 9 as against 11.

Names of places.	During the week ending 17th February 1899			During the week ending 24th February 1899.			During the week ending 3rd March 1899.			During the week ending 10th March 1899.		
	Imported.	Indigenous.	Indigenous & Imported.	Indigenous.	Imported.	Indigenous & Imported.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths.												
1 Champion Reefs	10	8	..	4	5	..	..	2	2
2 Marikuppam	5	4	..	6	5	..	..	1	2
3 Mysore Mines	11	7	..	..	12	9
4 Oorgaum Village	4	1	..	..	..	..
5 Steven's Camp	14	7
6 Police Lines, Oorgaum Camp	1	1	..	..	..	..	..	..	..
7 Balaghat
8 Mastikan
9 Plague Hospital
10 Oorgaum Camp
11 Nine Reefs
12 Krishnagiri Camp
13 Coronandrel Camp
14 Peddapalli
15 Oriental Mine
16 Balagompalli Block
17 Tank Block
18 Gold Fields
19 Sorakepet
20 Konamakkampali
Total .	1	1	16	14	..	..	32	21	..	..	*42	*26
											1	1
											49	30

*These consist of 8 days' figures.

82
452
23

Up to the commencement of the present week, the taluks of Mysore, Seringapatam, Hunsur and Mandya were infected.

In the Mysore taluk, cases occurred only in one village in the present week ; in Seringapatam taluk cases decreased in three villages including Ganjam, and one village became newly infected. In Hunsur taluk, the number of cases at Bellikere, the only village which remains infected, decreased from 9 to 4. There were no cases in the taluk of Mandya, which has now been free for two weeks continuously, but one village in the taluk of Hegga Devankote was newly infected during the week.

In the Mysore City the figures were as follows :—

	Plague cases.	Plague deaths.	Total mortality.	Normal recorded mortality for past 5 years during the same period.
For week ending 17th Feb. 1899	282	249	300	33
Do 24th do	264	204	255	33
Do 3rd March 1899	194	186	233	35
Do 10th do	140	124	160	36

Plague continues to decrease steadily in the Mysore City there being a very satisfactory drop in the total mortality from 233 to 160 and in plague attacks from 194 to 140.

A complete census of the city will be taken next full moon night, but it is estimated by the Chief Plague Officer that up to the 28th February only some 18,200 people had left the city, the population on that date standing at 53,044 as against 74,048 recorded at the last census of 1891 of whom 2,776 have died from all causes during December 1898 and January and February 1899.

RULES FOR EVACUATION AND DISINFECTION OF INFECTED TOWNS AND VILLAGES OTHER THAN THE CITIES OF BANGALORE AND MYSORE.

A. Evacuation.—1. On a town or village first becoming infected, the inhabitants should be encouraged to vacate their houses and live in huts outside the town or village, and where necessary, helped with materials for huts.

2. In a Municipality or a fairly large town or village, and where the case reported is the first indigenous one, the evacuation may be confined to the infected house and the houses adjacent to it and to the houses of friends or relatives who may have visited the infected house. At the same time all the inhabitants should be strongly advised to commence preparations for the evacuation of the whole town ; for, in this, if the plague spreads, lies their only safety.

3. When the plague shows signs of spreading, no efforts should be spared to induce, at least, the healthy families to evacuate ; the infected families, if not inclined to move, may be left in the town though every endeavour should be made to persuade them also to move out.

4. When evacuating the town, care should be taken to have infected families, as far as possible, huddled separately and at some distance from the uninfected ; otherwise infection will continue to spread.

5. Among the infected families also it is desirable that the sick should be kept in a separate shed from the healthy.

6. Infected families moving into huts should be discouraged from taking with them more articles than they absolutely require in the way of bedding, clothing, &c., and any articles they do take out should be disinfected by exposure to the sun, and by soaking in boiling water where this can be done without damaging them.

7. The District Plague Officer should, in consultation with the Deputy Commissioner, arrange for a safe place for the custody of cash and valuables belonging to those who have vacated their houses.

In the case of infected houses, such articles should be usually removed to a strongly built house in the town itself, which may be acquired for this purpose.

This house should be provided with a guard of, at least, two policemen night and day.

Articles from uninfected houses can be either kept in the nearest Police Station, or in the Taluk Cutcherry, or if room is not available, in another house in the town itself, to be acquired for the purpose, and guarded as above.

8. Before evacuation of an infected house, a list of all the members of the household should be made out, and the members should be kept under daily observation in their huts until the expiry of 10 days from the date of the last case among them.

9. Before an infected family is allowed to join the uninfected families, the articles of bedding, clothing, &c., which they took with them into the huts should be again disinfected by exposure to the sun, and, where possible, by boiling.

10. Uninfected families should be allowed to vacate their houses without any of the restrictions as above, but they should be warned against re-entering their houses after evacuation, and against intercourse with infected families ; and any offender in this respect should, with his whole family at once be treated as infected, and placed under the same restrictions as to observation and disinfection as an infected family.

11. A family should be considered infected

- (a) if a case of plague or a suspicious case has occurred in it within the previous 10 days ;
- (b) or if living in a house adjoining an infected family ;
- (c) or in whose house a dead rat has been found, the cause of death of which cannot be satisfactorily explained.

12. When a village is evacuated, it is the first duty of the authorities to make suitable arrangements for guarding vacated houses, and for protecting those living in huts. They should also see that the Regulations as regards passes and observation notices are strictly enforced, and intercourse with neighbouring villages, as far as possible, prevented.

B. Disinfection.—1. As soon as any house, infected or otherwise, is vacated, the authorities will see that it is sealed up, and re-occupation not permitted until disinfection or cleaning, as laid down in the Rules contained in Appendix (a) attached, has been effected.

2. For the disinfection of infected villages in a taluk, the District Plague Officer should at once, in consultation with the Deputy Commissioner, arrange for the employment of as many disinfection gangs as may be necessary.

3. Each gang should consist of:—

1 head gangman or maistry on Rs. 12.	
7 coolies on	, 7 each.
2 toties at	, 10 "

Note.—Where toties are not needed either or both may be converted into an additional one or two coolies on Rs. 7 each.

4. Each gang should be supplied with the following articles:—

2 Pickaxes.	6 Brushes.
2 Momaties.	3 Baskets of chunam.
1 Crow-bar.	1 Bundle of straw.
3 Earthen pots or buckets.	1 Bottle of Kerosine Oil.
6 Brooms.	{ For each day's work.

Note.—The supply for each day may vary according to actual consumption.

5. The number of gangs to be employed will depend on the number of villages affected in each taluk, and on the extent to which the villagers can be persuaded to help in the disinfection of their own houses. On an average two gangs will, it is expected, be found to suffice for each taluk. A gang should disinfect an average of at least 6 houses daily.

6. The work of each gang should be daily carefully supervised by the Plague Inspector and Assistant Plague Inspector, and frequent inspection of the disinfection work should be made by the Amildar and the District Plague Officer.

7. Where possible, the villagers themselves may be formed into gangs and trained to disinfect, but each such gang should be placed under a trained head gangman.

8. The villagers who are prepared to do their own disinfection, may be supplied free with lime for the white-washing of their houses.

9. In the case of the well-to-do residents of the village or town, a small charge for the disinfection of their houses, may be levied, on the following scale, viz:—

Rs. 2 for the first 10 ankanams including lime washing

Re. 1 for the first 10 ankanams excluding lime washing.

Re. 1 for each subsequent 10 ankanams or fraction thereof including lime washing.

Annas 8, excluding lime washing.

This charge should in no case be levied unless the Amildar is satisfied that the family is well able to afford it, and should only be levied under the Amildar's orders.

10. A list of villages, together with the charges levied, will be sent by the Amildar, at the end of 15 days after disinfection has been completed, to the Deputy Commissioner, and by him to the Plague Commissioner.

11. A Register in the form shown in appendix (b) should be kept in each taluk, showing the number of infected houses and the number of deserted houses in each infected town or village in the taluk, and the date on which disinfection or cleaning thereof was effected, and the amount of any charges for disinfection or cleaning recovered thereon. A statement showing the progress of disinfection, village by village, for each taluk should be submitted at the close of each month by the Amildar to the Deputy Commissioner, through the District Plague Officer.

12. By the 10th of each month the District Plague Officer will submit to the Plague Commissioner, through the Deputy Commissioner, a statement, in the form given in appendix (c), of progress in disinfection made during the previous month in his district.

APPENDIX (a)

Simple instructions for the Disinfection and cleaning of houses in infected towns and villages in the mofussil.

1. After all the inmates have moved out of the house, if disinfection cannot be at once carried out, securely fasten up the house by locking and screwing or nailing up the doors and putting a seal on the lock, to prevent any one getting into it unnoticed: then remove portions of the roof and make openings in the walls to freely admit sun and air, but not large enough to allow any one to get into the house through them.

2. On going to the house to disinfect it, see that all those engaged in disinfection wear shoes or boots, and allow no one with wounds on hands or feet near the house.

3. See also that the disinfection gang is supplied with the following articles:—

2 Pickaxes,	6 Brushes,
2 Momaties,	3 Baskets of chunam,
1 Crow-bar,	1 Bundle of straw,
3 Earthen pots or buckets,	1 Bottle of Kerosine oil.
6 Brooms,	{ For each day's use.

Note.—The supply for each day may vary according to actual consumption.

4. On reaching the house have all furniture, clothing, grain, and other articles of every description taken out of the house.

5. Burn all cheap articles, such as matting, firewood, old clothing, rags, small bundles of grain, &c., and on the fire put the pots and grinding stones, &c., which can be removed after being thoroughly heated.

Note. (1) Before destroying these articles, the disinfection officer will, of course, have them valued, gathering for that purpose a punchayet consisting of the owner or a relative if possible, and two or three respectable neighbours.

Note. (2) The value of articles destroyed should be paid to the owner or his agent, if known, on the same day as the articles are destroyed, and a receipt taken from him.

6. After destruction of the cheaper and less valuable articles, as in Rule 5, the better articles, such as good furniture and good clothing, &c., should be aired and spread out in the sun. Such things as can be soaked in boiling water, without damage, should be put in a large pot full of boiling water and kept there for 10 minutes with the water bubbling all the time.

7. If, while disinfecting the house, any dead rats are found, pour a little kerosine oil over them and burn them. Do not let any one touch the dead rats with their hands. If they must be picked up and moved before being burnt, pick the body up between two sticks and so carry it out.

8. After emptying the house as above, cover the floor, unless it is a pucca one, with a layer of dry grass or straw or old bamboos and set fire to it; keep the fire burning so that the whole floor may be thoroughly burnt without setting the house on fire.

9. If the floor is a mud one, after burning it dig it up until dry and clean earth is reached, and carefully remove the earth so dug up, to a distance from the town or village.

10. In replacing the floor, see that good clean earth from an uninfected locality is used.

11. After doing all the above, thoroughly whitewash, with freshly slaked lime, the floor, walls, rafters and ceiling of the house.

12. See that all excreta in the latrines and the contents of cesspools and pits on the premises are burnt.

13. Then put back the furniture and other disinfected articles into the house.

APPENDIX (b).

Disinfection Register of Taluk District

Village.	Street.	House No.	Name of house-owner or tenant.	Whether (a) infected and vacated or (b) only vacated.	Whether disinfected and lime washed or only lime washed with date thereof.	Amount of disinfection or of lime washing fees, if any, recovered thereon.

Amildar.

APPENDIX (c)

Statement of Progress in Disinfection in the District for the month of 1899.

Taluk.	Village.	Number of houses disinfected.	Number of houses only lime-washed.	Number of disinfection gangs employed during the month.	Amount of fees, if any, recovered for disinfection or lime washing of houses.	Remarks.

District Plague Officer.

Circular No. 8038, dated Bangalore, 10th March 1899.

It has been brought to the notice of the undersigned by the Senior Surgeon that various kinds of expensive and unnecessary disinfectants and deodorizers are being indented for by officers on Plague duty throughout the Province.

After consultation with the Senior Surgeon, it has been decided to do away with disinfection by chemicals in all towns and villages other than the Cities of Bangalore and Mysore and to rely for